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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH NC 27627

EXAMINER

WALLS, D

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/13/00

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/299,403

Applicant(s)
Peele

Examiner
Dionne A. Walls

Group Art Unit
1731



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-24 is/are pending in the applicat

Of the above, claim(s) 8-20 and 24 is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-7 and 21-23 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, and 21-23, drawn to a method for modifying a tobacco curing barn, classified in class 131, subclass 299.
 - II. Claims 8-20 and 24, drawn to a method for curing tobacco, classified in class 131, subclass 299.
 2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as it involves a method that does not involve the removal of direct-fire heating units from a tobacco curing barn. See MPEP § 806.05(d).
 3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
 4. During a telephone conversation with Mr. August Borschke on Monday, June 5th, 2000 a provisional election was made with traverse to prosecute the invention of I, claims 1-7 and 21-23.
- Affirmation of this election must be made by applicant in replying to this Office action.

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Claims 8-20 and 24 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-5, 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler (US. Pat. No. 4,206,554) in view of Bullock, Jr. (US. Pat. No. 5,018,281) and O'Donnell, Jr. et al (US. Pat. No. 5,803,081).

Fowler discloses a method for bulk curing of tobacco in an energy efficient manner, which consists of a a curing barn 10 having chambers 21,22 for containing tobacco. Below the chambers are provided plenums 35,36 such that pressurized air from a common source 40 may be directed therethrough to cure the tobacco. The heat source may be electric (corresponding to the claimed "heating unit that does not provide contact of tobacco...with exhaust gases containing nitric oxide combustion products"/ "electrical heating unit") (col. 3, lines 21-49; col. 3, lines 47-48, see figs.). While Fowler does not disclose modifying an *existing* tobacco curing barn for the purpose of curing tobacco by its efficient electric method, Bulluck, Jr. discloses, in its Background of the Invention, that there are tens of thousands of barns already existing on tobacco

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farms having means for curing tobacco using conventional means which are not particularly energy efficient. In view of the disclosure of Bulluck, Jr., with the cost of tobacco barns continuing to increase, one of ordinary skill in the art would understand the desirability of modifying existing barns over buying new ones (col. 1, lines 12-39, col. 2, lines 3-6, 47-50). Therefore, one of ordinary skill in the art would have been motivated to modify an existing tobacco barn such that it includes means for curing tobacco in accordance with the method disclosed in Fowler in order to enable struggling farmers to make efficient use of their energy dollar as taught in the background of Bulluck, Jr. (col. 2, lines 3-6). Further, while Fowler modified by Bulluck, Jr may not disclose the step of removing a direct-fired heating unit from a barn already equipped with such a unit, O'Donnell, Jr et al teaches that convection heating (corresponding to the claimed "electrical heating") is superior to conventional curing methods because it reduces or preventing the occurrence of nitrosamines in tobacco (col. 2, lines 32-34). This would suggest to one of ordinary skill to modify the process of Fowler modified by Bulluck, Jr. to include substituting the regular curing means (corresponding to the claimed "direct fire heating") in a tobacco barn, disabling it from use during curing, physically removing it from the barn, and replacing it with electrical heating means in order to be ensured of an improved tobacco product with virtually no carcinogenic potential as taught in O'Donnell, Jr. et al (col. 2, lines 35-37).

Regarding claim 5, it would follow that since the electrical-heating tobacco curing method is used, it would obviously prevent exhaust gases containing nitric oxide from coming in

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contact with the tobacco in the barn during curing because there is no burning of fuel involved in an electric heating process to even produce exhaust gases; therefore, the requirements of this claim are satisfied.

7. Claims 2, 6, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler (US. Pat. No. 4,206,554) in view of Bullock, Jr. (US. Pat. No. 5,018,281) and O'Donnell, Jr. et al (US. Pat. No. 5,803,081) as applied to claim 1 above, and further in view of Applicant's Admitted Prior Art.

Regarding claim 2, Applicant admits on page 2, lines 19-20, that typical direct-fire heating units are powered by propane. It would have been obvious to one having ordinary skill in the art at the time of the invention to have removed such a heating unit from the existing barn because these types of heaters are conventional in the tobacco art.

Regarding claim 6, Applicant admits on page 3, lines 13-19 of the instant specification, that "tobacco curing barns equipped with non-direct-fire heating units, such as heat exchange units" are known in the tobacco art. It would have been obvious to one having ordinary skill in the art at the time of the invention to equip the tobacco barn with a heat exchange unit for curing tobacco because this is well-known in the tobacco art.

Regarding claim 21, on page 6, lines 11-15 of the instant specification, Applicant admits that the temperature to which the tobacco is exposed during curing is typically in the range of about 35 - 75 degrees C, and the time over which tobacco is exposed to those temperatures usually is at least about 120 hours, but usually less than about 200 hours. Therefore, it would have

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been obvious to one having ordinary skill in the art at the time of the invention to cure the tobacco, using indirect heating method, at these time and temperature ranges because these are conventional parameters and are well known in the tobacco art.

Regarding claim 23, since there was no mentioning of microwave radiation equipment in conjunction with the indirect heating curing method, it follows that the curing barn would not be equipped with such equipment as it is not involved in this type of curing process.

Conclusion

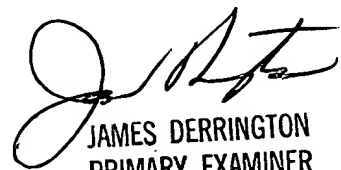
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dionne A. Walls whose telephone number is (703) 305 - 0933. The examiner can normally be reached Monday-Thursday from 6:30AM - 4:00PM (EST). The examiner can also be reached on alternate Fridays.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached at (703) 308-3837. Additionally, the fax number for this Group is (703) 305-7718.



Dionne A. Walls

June 12, 2000



JAMES DERRINGTON
PRIMARY EXAMINER
ART UNIT ~~137~~ / 731